



# Chance Favors the Prepared Community: Preparing for a Flu Pandemic

August 3, 2007

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## Approximate beginning of the epidemic, 1918

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before  
sept. 14

before  
sept. 14

between  
sept. 14 - 21

between  
sept. 21 - 28

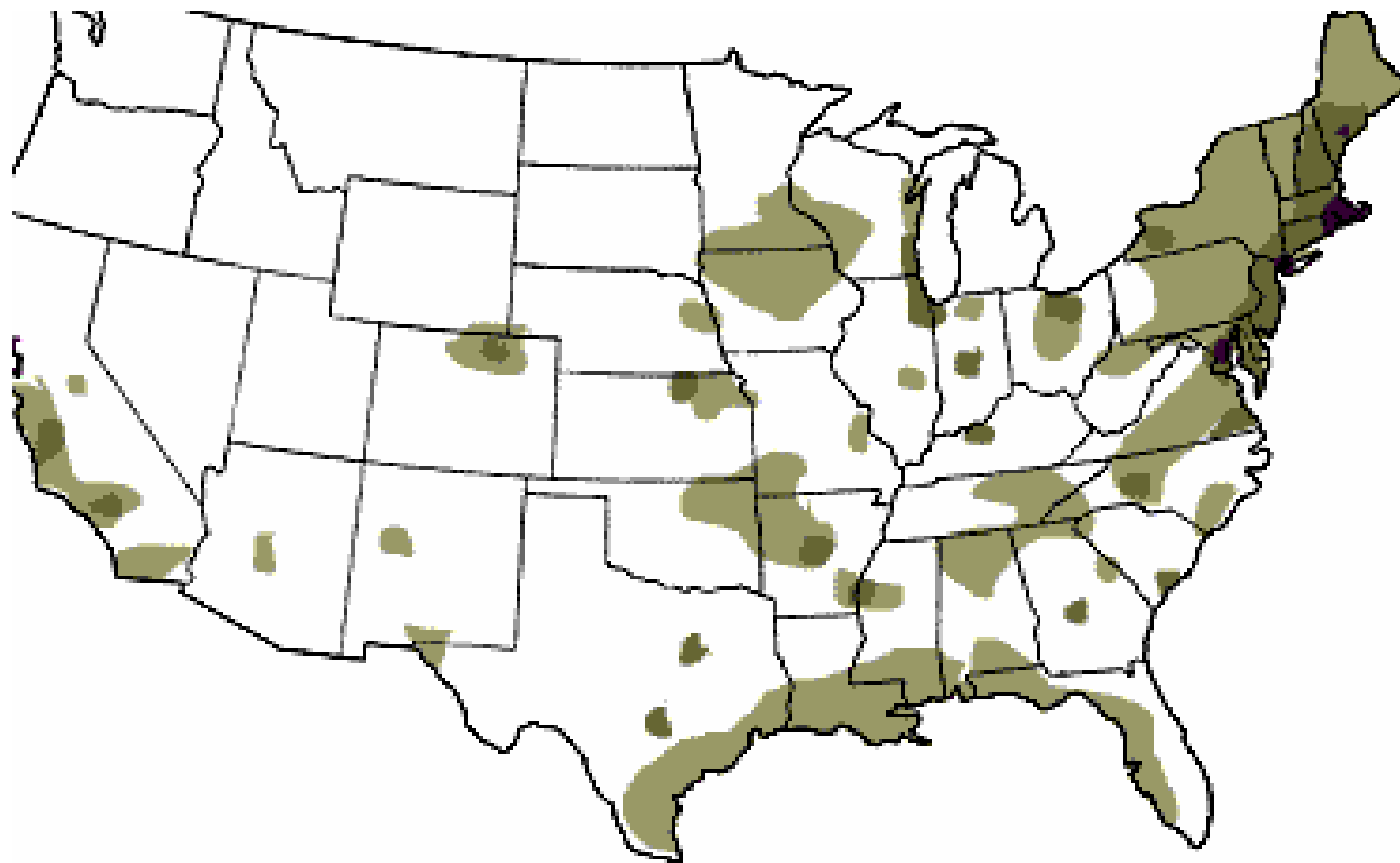
between  
sept. 28 - oct. 5

after  
oct. 5

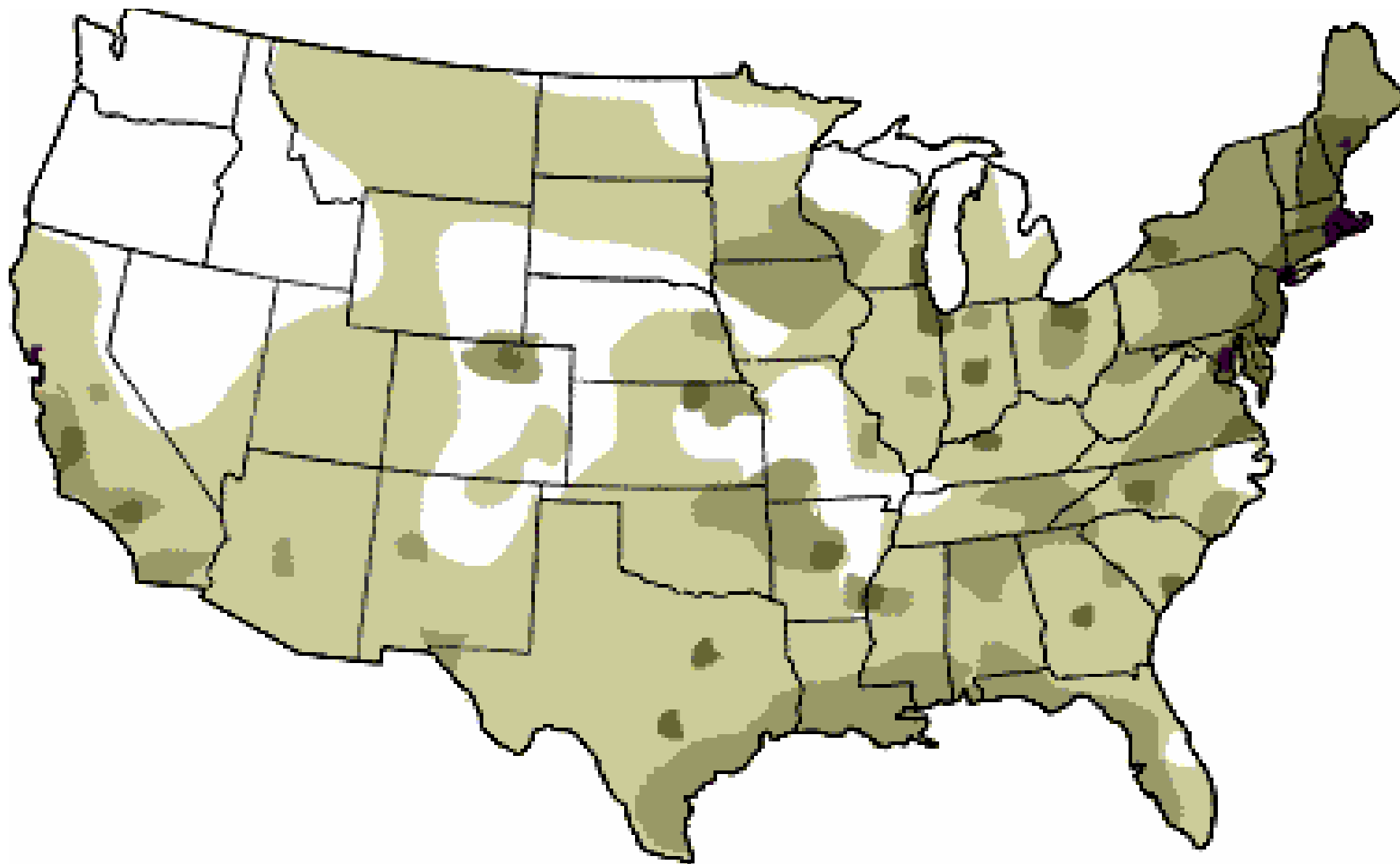
*Source: America's Forgotten Pandemic - The Influenza of 1918 - 1989*

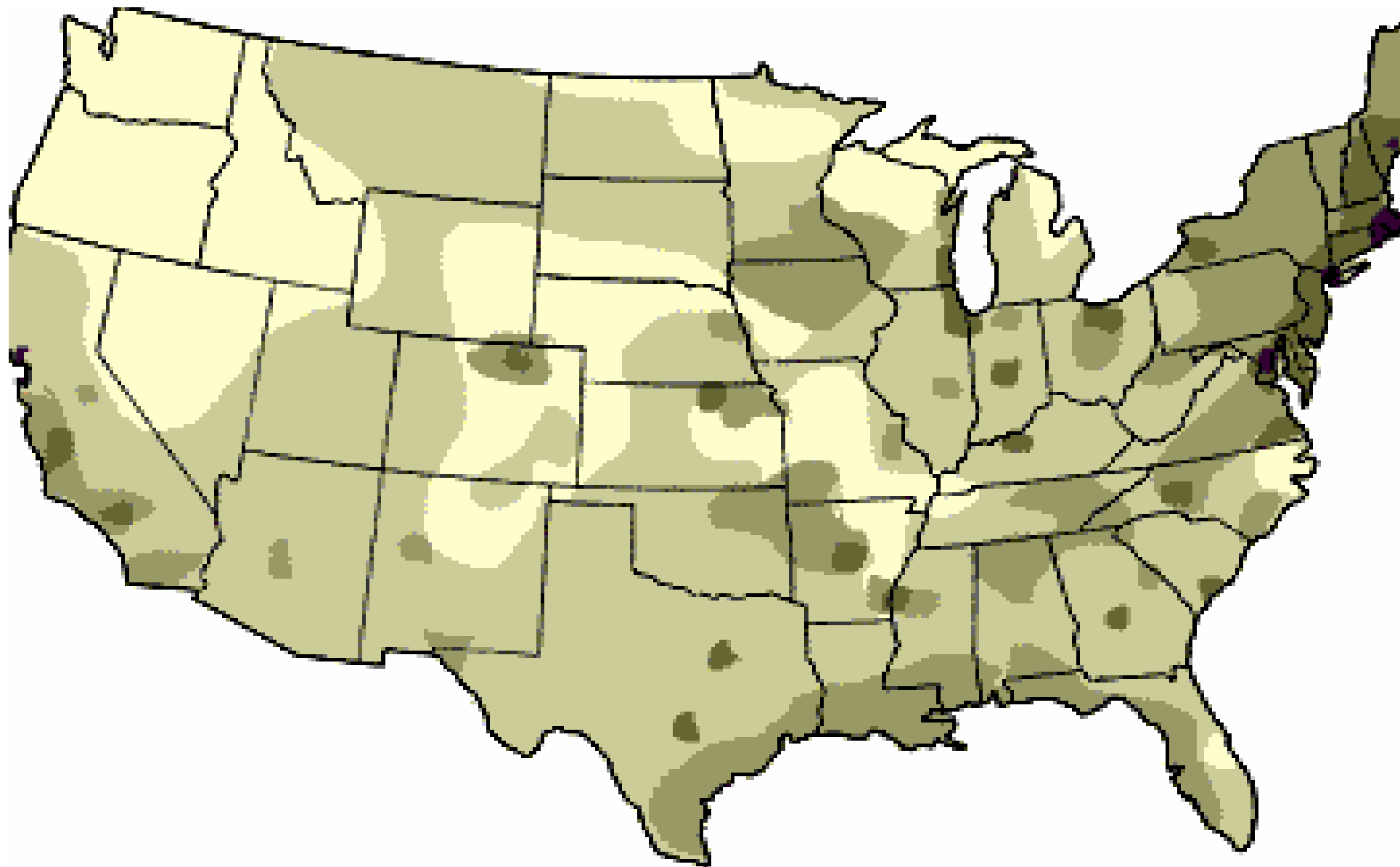


before sept. 14	between sept. 14 - 21	between sept. 21 - 28	between sept. 28 - oct. 5	after oct. 5
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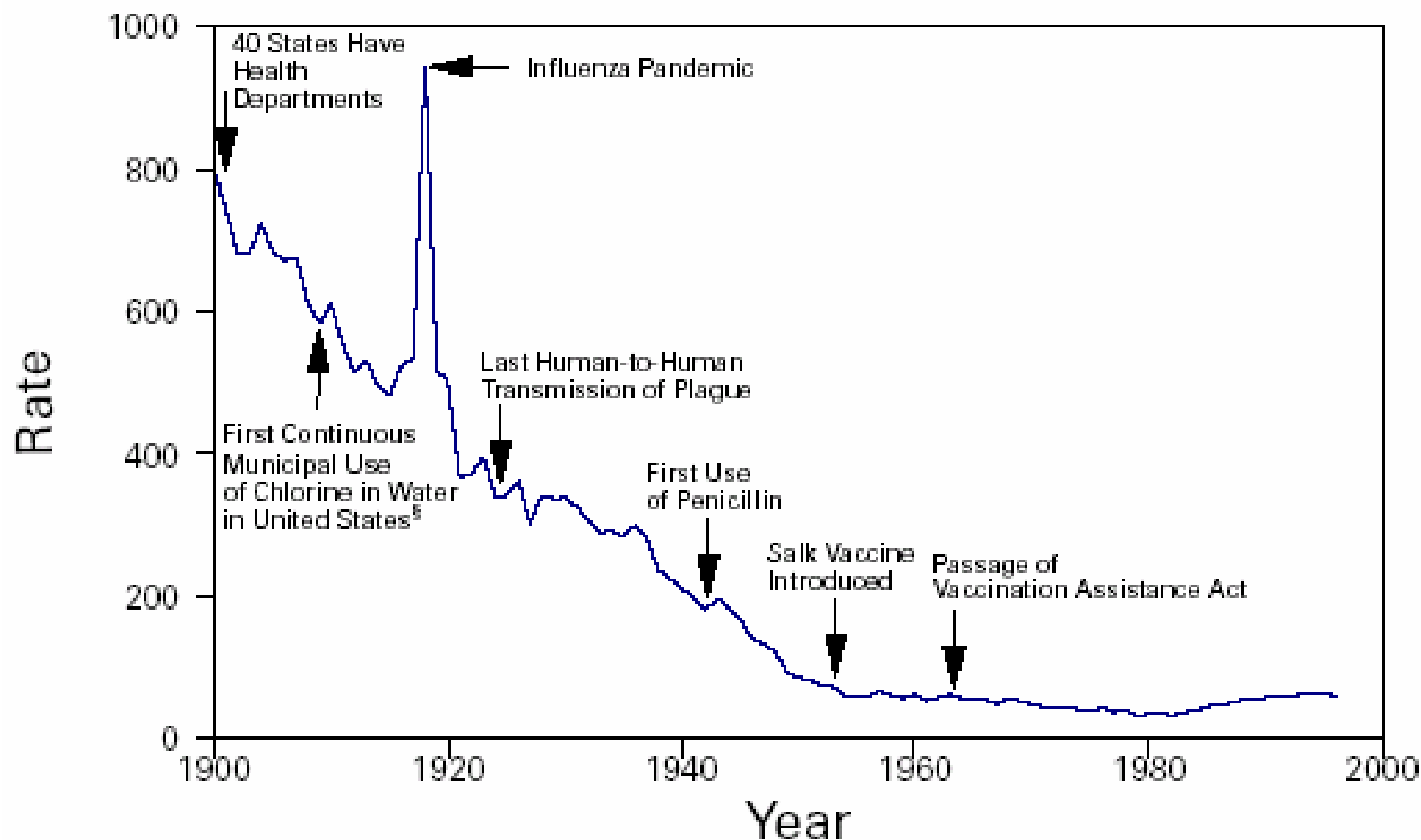
before sept. 14	between sept. 14 - 21	between sept. 21 - 28	between sept. 28 - oct. 5	after oct. 5
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before sept. 14	between sept. 14 - 21	between sept. 21 - 28	between sept. 28 - oct. 5	after oct. 5
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**FIGURE 1. Crude death rate\* for infectious diseases — United States, 1900–1996<sup>†</sup>**



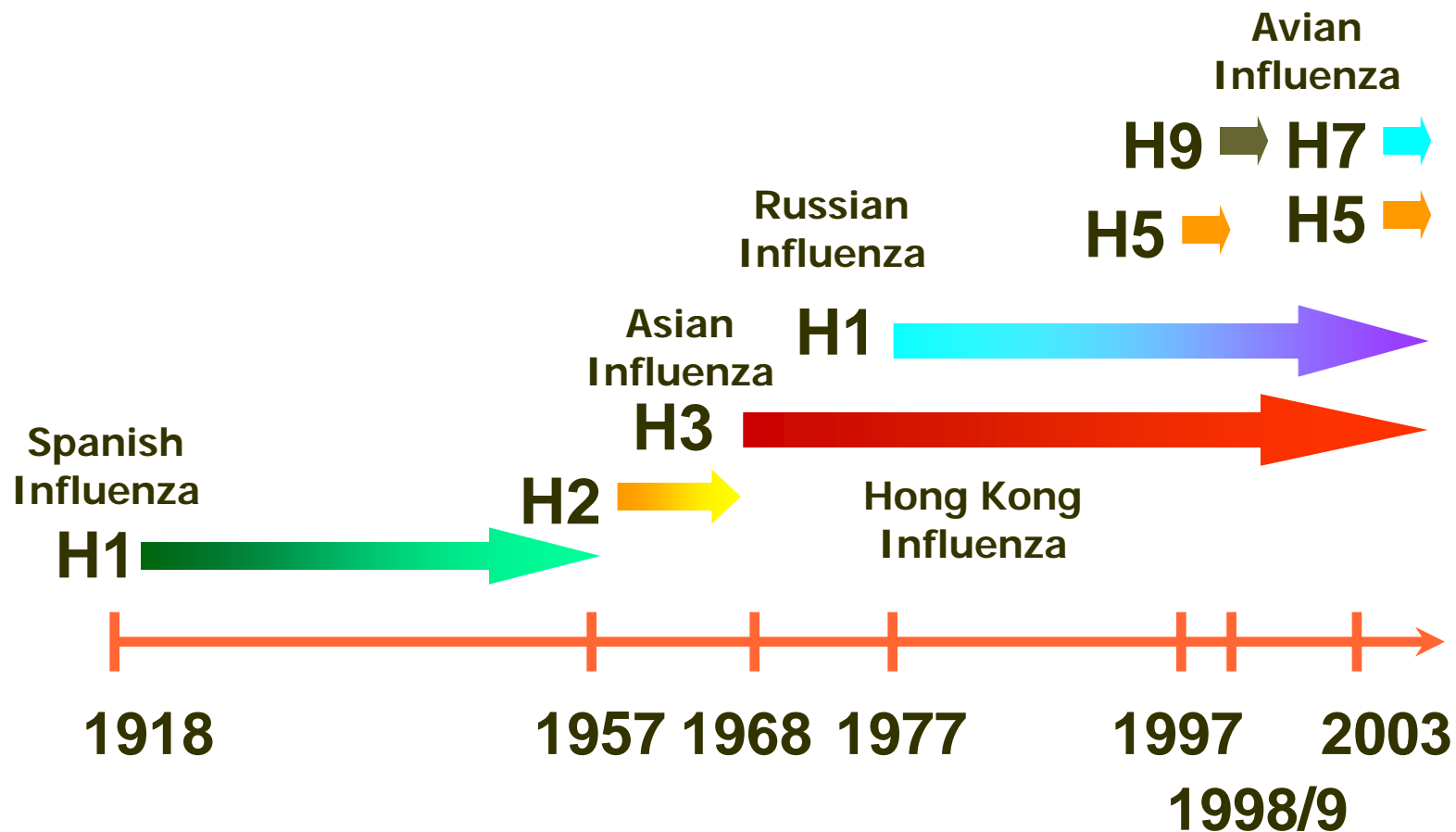
\*Per 100,000 population per year.

<sup>†</sup>Adapted from Armstrong GL, Conn LA, Pinner RW. Trends in infectious disease mortality in the United States during the 20th century. *JAMA* 1999;281:61–6.

<sup>§</sup>American Water Works Association. Water chlorination principles and practices: AWWA manual M20. Denver, Colorado: American Water Works Association, 1973.

# Timeline of Emergence of Influenza A Viruses in Humans

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# In a Pandemic...

- Despite all preparedness efforts, Virginia will not be spared from a flu pandemic.
- All businesses, hospitals and government agencies will feel the effects of a pandemic.
- Ten to 25 percent of the workforce may be ill at any one time.

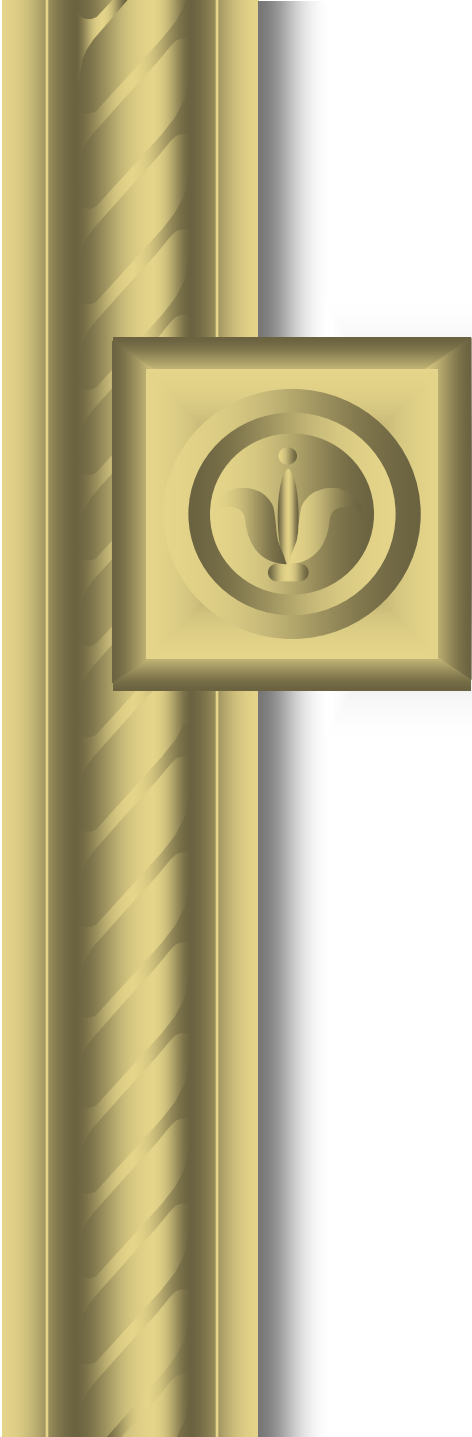


**Hope?**

**Hope is not a strategy...**

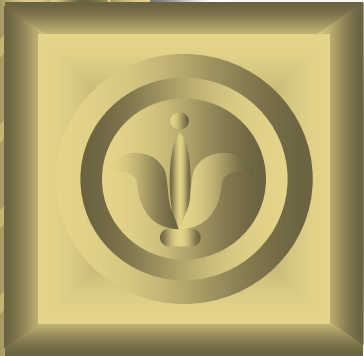
**Julie Gerberding, Director,  
Centers for Disease Control and Prevention**





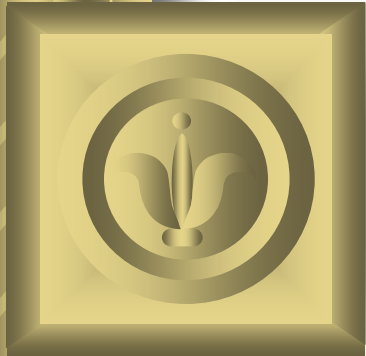
We shall require a  
substantially new  
way of thinking if  
mankind is to  
survive.

Sign on the wall of Albert  
Einstein's Princeton office



# **Chance Favors the Prepared Mind**

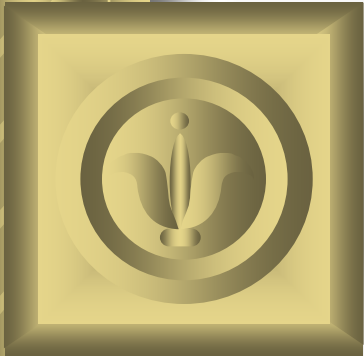
**Louis Pasteur**



# Goals

**PARTICIPATE, PARTNER, PREPARE**

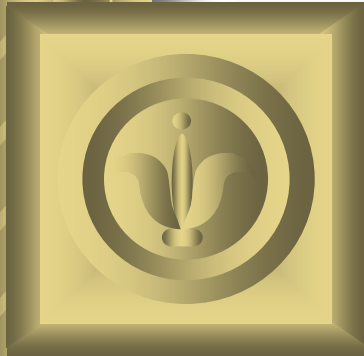
**LEARN/QUESTION, CONNECT, INFORM/ACT**



**"The pandemic clock is  
ticking, we just don't  
know what time it is"**

**E. Marcuse**






**How do we Prepare for  
Emergencies in the Face  
of Uncertainty?**





Perhaps, preparing for  
uncertainty is about  
improving how we  
function within the  
'certainty' of  
everyday life and...

being poised to "scale up"



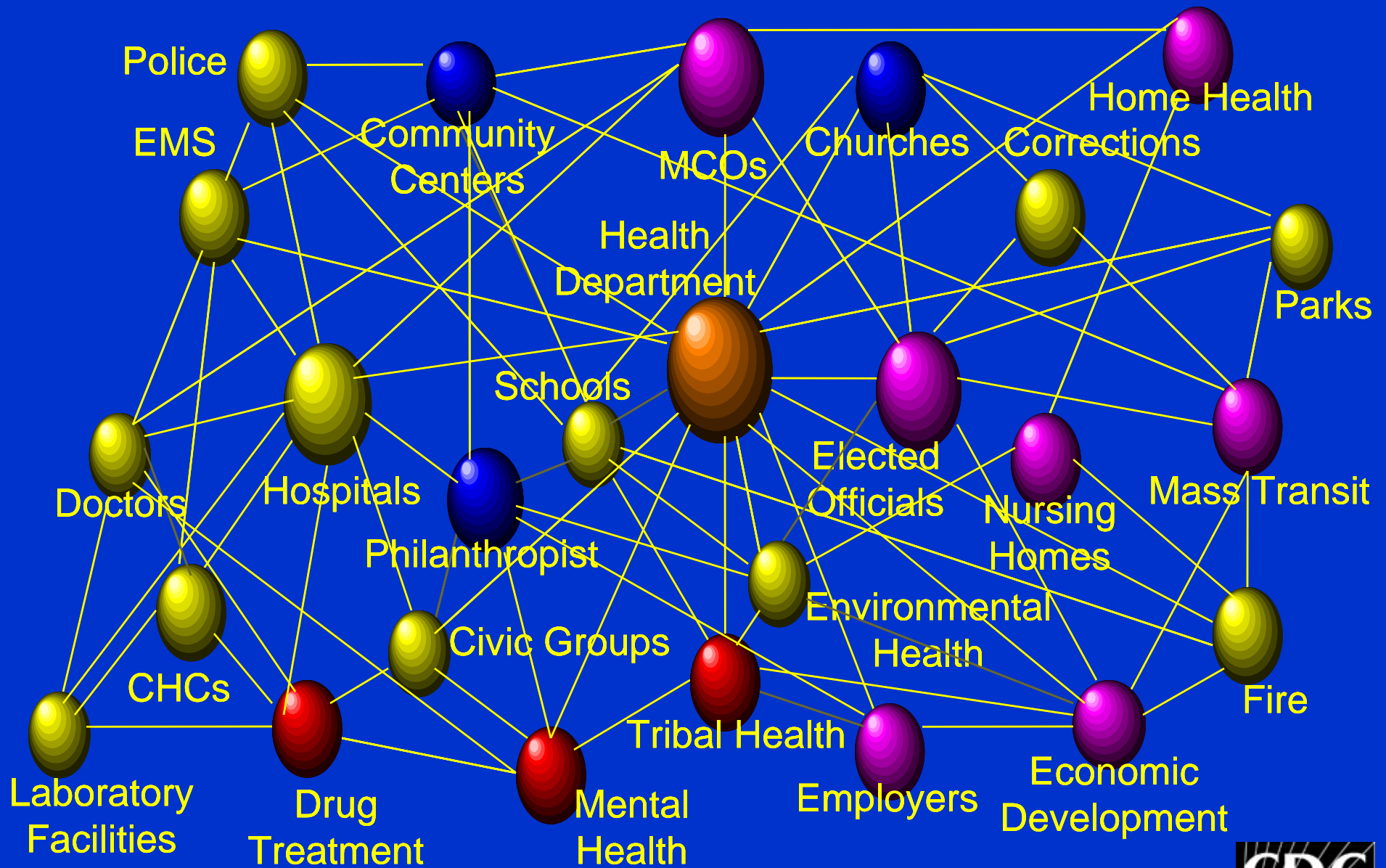
***THE LESS THERE  
IS TO JUSTIFY A  
CUSTOM, THE  
HARDER IT IS TO  
GET RID OF IT!***

***Mark Twain***

# Ongoing issues

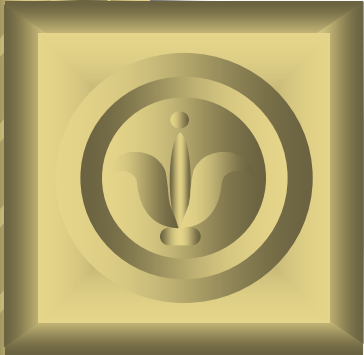
- Communication/Awareness
- Surveillance/Investigation
- Containment/Control
  - Distribution of antivirals/vaccine
  - Quarantine/Social Distancing
- Healthcare Surge
  - Issues related to special medical needs

# The Public Health System



SAFER • HEALTHIER • PEOPLE™

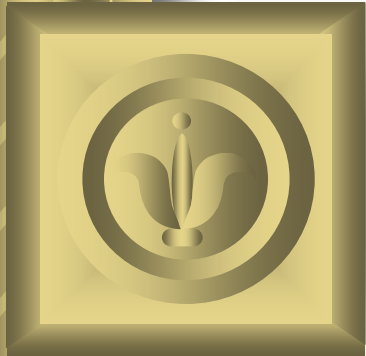




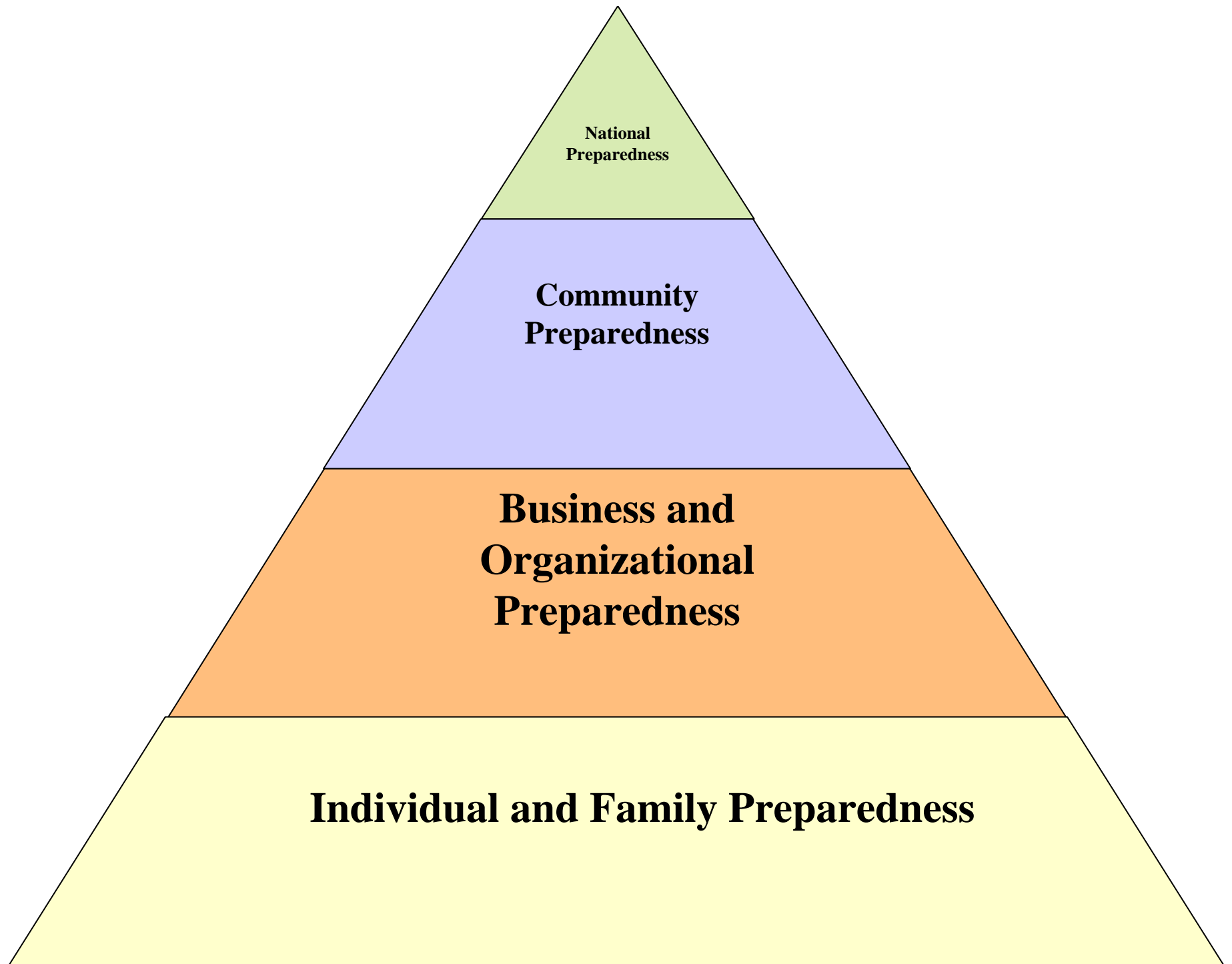
# Chance Favors the Prepared Community

Mark Levine

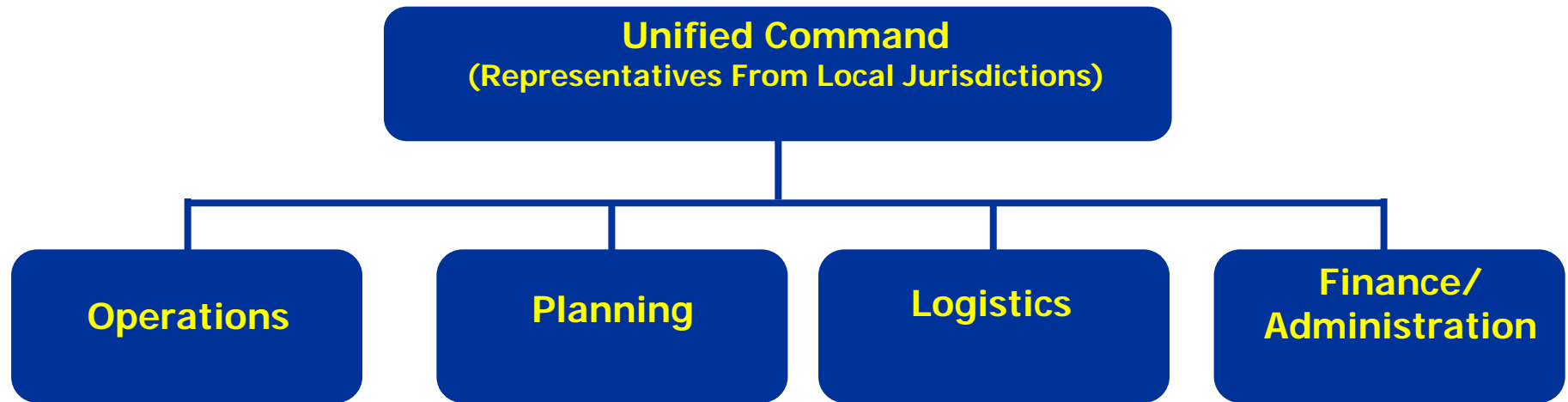
What is a  
“Prepared Community?”



# Uncovering our Hidden Assets



# Unified Command







# Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States—

Early, Targeted, Layered Use of Nonpharmaceutical Interventions

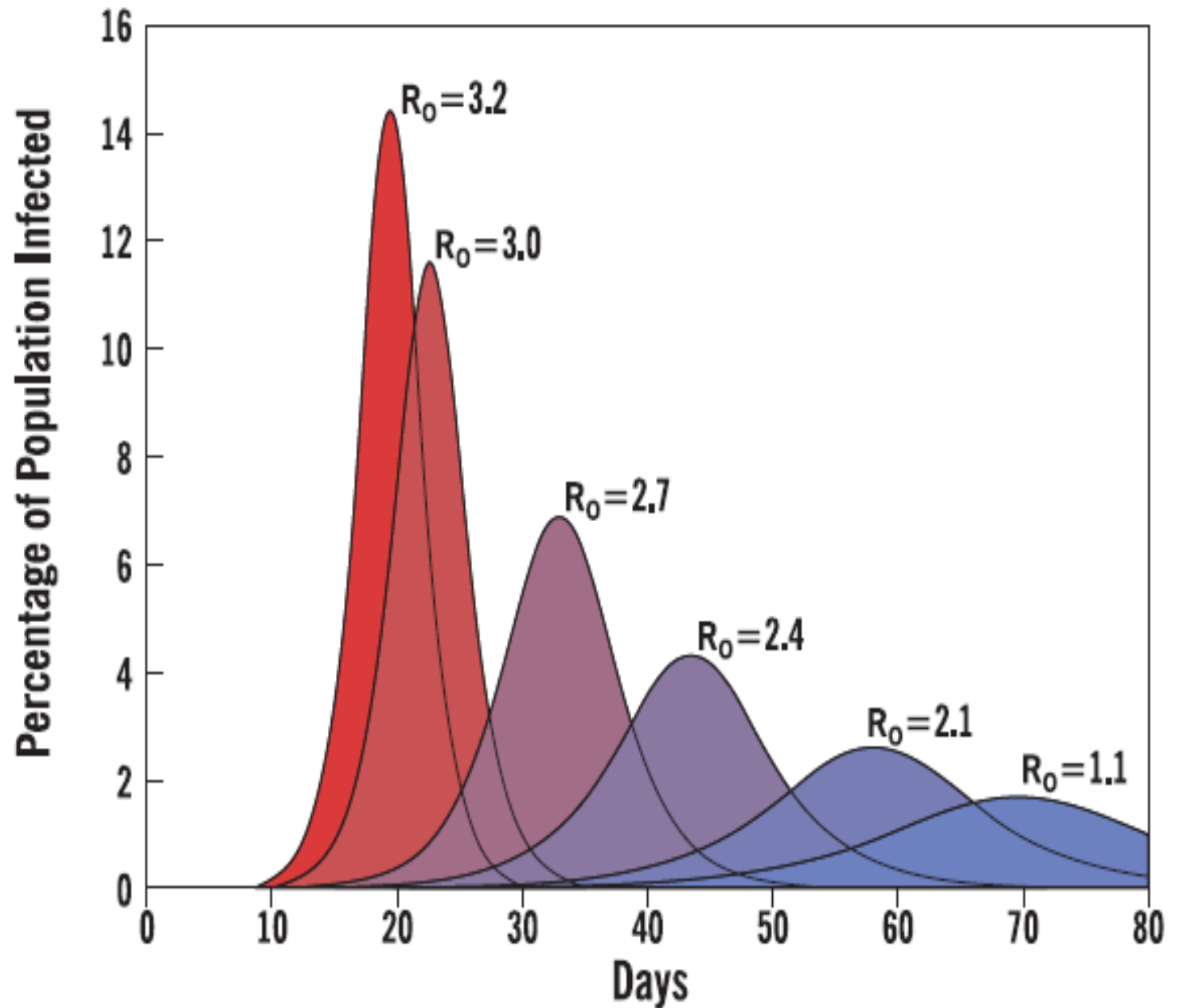


**NPI**

# Summary of NPI

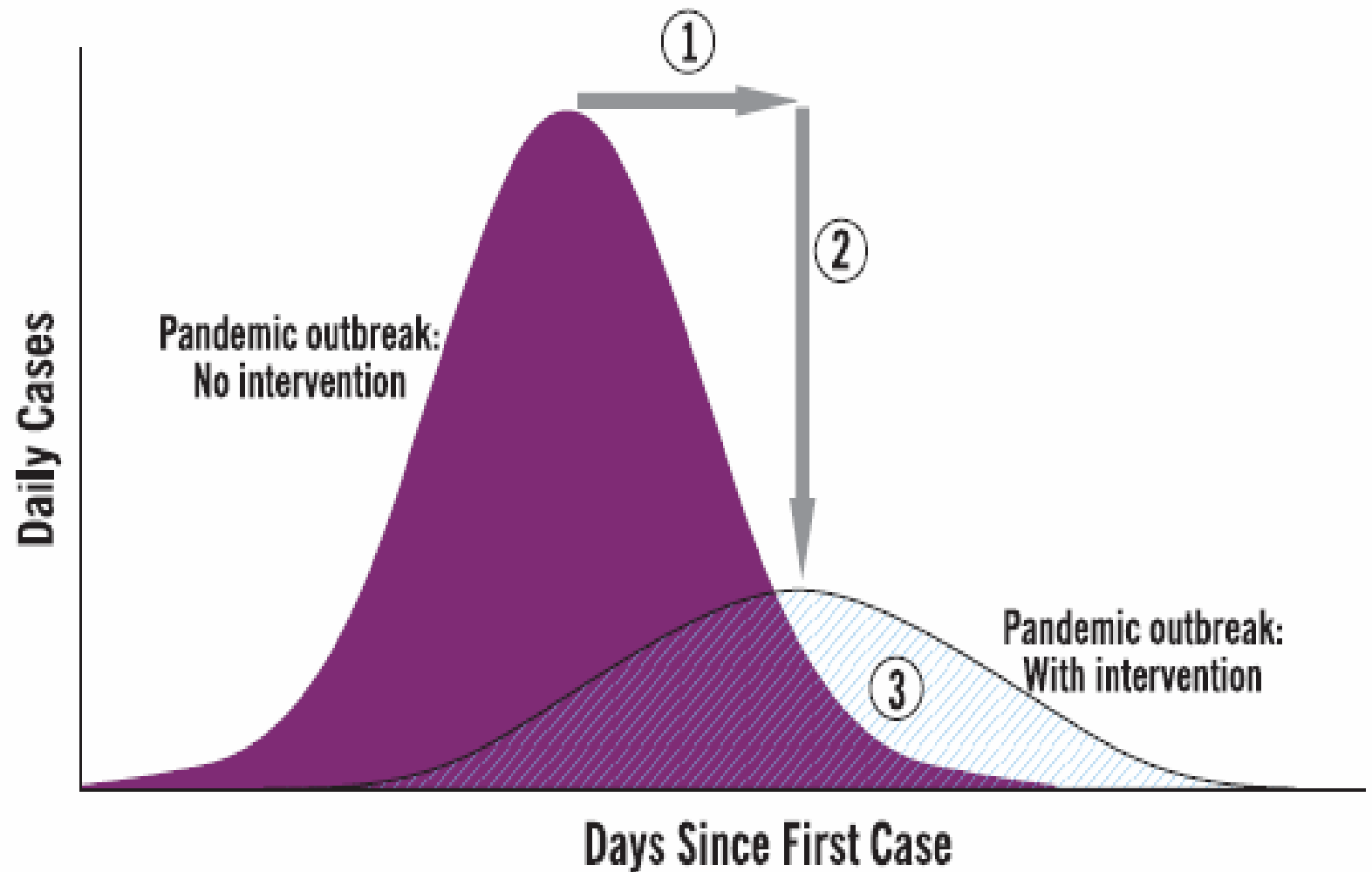
- Isolation and treatment of people infected with pandemic flu strain
- Voluntary home quarantine of members of households with pandemic flu strain
- Social distancing
  - Children: school closure and out of school social activity suspension
  - Adults: Cancellation of public gatherings; alteration of workplace environments

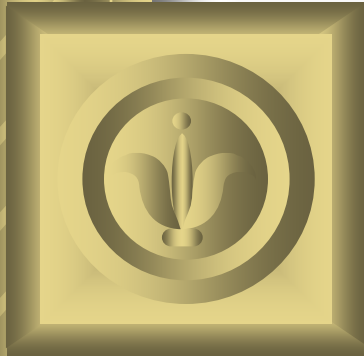
## Effect of $R_0$ on Epidemic Curves



## Goals of Community Mitigation

- ① Delay outbreak peak
- ② Decompress peak burden on hospitals / infrastructure
- ③ Diminish overall cases and health impacts





# Goal of Planning for Large Scale Health Emergencies

Enhance our capacity and ability  
to better perform our day to day  
tasks and build capacity to ramp  
up for large scale health issues



# The Challenge for Leaders...

To inspire hope



# **Chance Favors the Prepared Mind**

**Louis Pasteur**

# **Chance Favors the Prepared Community**

**Mark Levine**



**Today: Start the  
process...**

- Learn/Question**
- Connect**
- Inform/Act**